

**REMARKS**

In the application, claims 1-21 are pending and rejected. After due consideration of the Examiner's comments in the Office Action of June 30, 2004, the claims have been amended to more clearly set forth what Applicants regard as their invention. Applicants respectfully request reconsideration of the claims as amended.

Objections to the Specification

The Examiner objects to the specification because embedded hyperlinks are included. Each specified location has been amended to eliminate the hyperlink.

Additional amendments to the specification are made to correct minor typographical or grammatical errors.

Rejections under §112

The Examiner rejects claims 2-10 and 26-29 under 35 U.S.C. §112, 2<sup>nd</sup> para., as being indefinite.

Claims 1-21 are rejected under 35 U.S.C. §112, 2<sup>nd</sup> para., as being vague and indefinite.

With regard to claim 1, the Examiner finds that there is no analysis step corresponding to the stated process in the preamble. Both the preamble and the elements of the claim have been amended to clarify the metes and bounds of the claim.

Claims 1, 8 and 15 have been amended to clarify the meaning of "query". Claims 5, 12 and 19 have been amended to clarify the meaning of "gene set" and "present/absent gene set". Claim 15 has been amended to eliminate the limitation "fragment S index", which was a typographical error.

The language "consistently expressed" and "consistently not expressed" in claims 4, 11 and 18 are terms that are well defined in the specification at pages 12, beginning at line 4, and 24, beginning at line 20. At page 25, line 17, the specification describes an additional threshold, T, for defining the gene expression consistency in terms of the minimum number of samples out of the total number of samples for which the genes are present or absent. It is submitted that the stated language is not vague and indefinite, and that sufficient description is provided in the

specification to apprise those of skill in the art what is meant by the terms “consistently expressed” and “consistently not expressed.”

#### Rejection under §102

Claims 1-21 are rejected under 35 U.S.C. §102(b) as being anticipated by Bassett et al. (*Nature Genetics Suppl.*, V. 21, pp. 51-55, Jan.1999). Bassett et al. provides an overview of an information system for large-scale gene expression experiments, including a data warehouse.

Applicants respectfully submit that Bassett et al. cannot anticipate the invention as claimed because it fails to disclose the unique structure of Applicants’ data warehouse, which is divided into three distinct databases. Bassett et al. describe a unitary data warehouse, with a relational format, that can be interfaced to receive information from external sources. As stated in the specification at page 8, line 17:

Unlike traditional data warehouse applications that deal with data representing relatively simple, and precise real-world facts, such as product sales, scientific data in general, and gene expression data in particular, represent complex and often imprecise phenomena. For example, the data may change over time as a reflection of the evolution of the underlying scientific methods used to generate data, and often represent interpretations of experimental results using complex analytical methods.

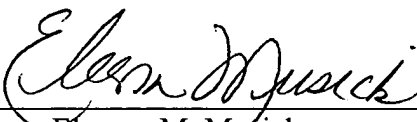
The partitioning of the data warehouse in three distinct databases as claimed by Applicants provides the advantage of greater accessibility for updating and refreshing data as scientific methods evolve. Further, the separate databases can be explored collectively or independently, thus providing faster access to the desired data. Bassett et al. fails to teach the partitioning of a data warehouse into three separate databases, where each database is dedicated to a different type of data. Accordingly, Bassett et al. cannot anticipate Applicants’ invention as claimed.

It is submitted that the foregoing amendments and arguments address and overcome each ground for rejection. Therefore, Applicants respectfully request that the Examiner withdraw the rejections of the claims and objections to the specification, allow all claims as now presented and issue a notice of allowance of the application.

Should the Examiner believe that prosecution of this application might be expedited by further discussion of the issues, he is invited to telephone the undersigned attorney for Applicants at the telephone number indicated below.

Respectfully submitted,

Dated: November 30, 2004

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